Original Research Article

Impact of Education on Dental Anxiety among the Patients Visiting Public Dental Hospitals in Pakistan

Hafiza Armish Siraj[1], Umair Hussain[2], Shanza Rehman[3], Shah Bano Khan[4], Amina Tariq[4*]

[1]de, Montmorency College of Dentistry, Fort Rd, Shahi Mohallah Walled City of Lahore, Lahore, Punjab, Pakistan
[2]Nishtar Institute of Dentistry, This is postal address of my house, Jinnah Town, Google it. I keep receiving mail of NID due to this. Kindly correct, 120/12 Jail Rd, across the road in, Jinnah Town, Multan, Punjab, Pakistan
[3]Dental Section, Punjab Medical College, Sargodha Road, Faisalabad, Punjab 38000, Pakistan
[4]University College of Dentistry, The University of Lahore, 1- Km Raiwind Rd, Sultan Town, Lahore, Punjab, Pakistan

Abstract

Aim: This study was designed while aiming that this study explore the association between educational level and level of dental anxiety among patients in Pakistan. *Method:* The current study was based on descriptive cross-sectional research design. Data was collected from the patients of public sector dental hospital of Lahore. Data was collected from 160 patients who visited dental hospital at surveying time and participated in the study as volunteers. To explore the relationship of educational level with regards to dental anxiety among patients, Chi square was used. *Results:* The results of Chi-Square revealed that educational level and dental anxiety showed significant difference (X^2=125.867, P> .001). Mild dental anxiety among patients with below matric education was higher (80%) followed by patients with education level of matriculation (70%), then came patients with Higher secondary school education (52%) and patients with graduation degree were 35%. With moderate to severe dental anxiety, patients with graduation degree were found to be higher (38%) and at lower level were the patients below matric education level (10%). Patients with dental phobia were found more in the category of graduated patients (27%) and least in patients below matric (10%). *Conclusion:* In conclusion, educational level was found to be significant with dental anxiety levels in the patients coming to the public dental hospitals in Pakistan. Factors behind these findings should be explored to fill the gap literature as patients with higher educational level have higher level of dental anxiety which is in opposite of previous literature.
Keywords: Dental anxiety, Phobia, Education, Dental fear.

INTRODUCTION

Dental anxiety or dental fear among children has been documented in numerous countries as a dilemma in public health [1], which has been explore at a much extended level. Anxiety is defined as a pathological condition is definite with extreme emotional state of fear, complemented by somatic signs related with over-reactivity of the autonomic nervous system [2, 3]. Whereas Dental anxiety is a state of strong physiological reactions concerning any dental treatment. It is a state that prolongs from the earlier experience to the present condition and stops the patients to enjoy dental treatment benefits taking [4]. Mostly, it was concluded that dental anxiety patients have negative beliefs linked with any dental treatment or dentist and have a tendency to overstress events related to dental treatment. For instance, a short term and simple dental treatment after local anesthesia could be called a very traumatic and challenging experience

for the patient [5, 6]. As a result, people with higher level of dental anxiety have a habit of delaying their dental treatment constantly that mediates the early intrusions and consequences in worsening of oral health issues. Childhood traumatic dental treatment is the major and highly important cause of developing dental anxiety among patients. But, the family attitude towards dental treatment is also considerable factor as it is an actual factor in dental anxiety development, as well as anxious temperament and socio-environmental aspects [7, 8]. Individuals with dental anxiety are not a uniform group; the occurrence is greater among females and people with low wages [7, 8]. The association of age and education has been studied to explore the level of dental anxiety but there contradictory results were obtained. Different research studies has been performed to explore the association between level of dental anxiety and education. Few of which showed that better education level allows the patient to cope better with

dental anxiety and have less dental anxiety level. However other showed no association between level of education and anxiety of dental treatment [8-10]. So, for explore this association in a better way among Pakistani population as lower-middle income country with lower literacy rate, this study was designed while aiming that this study explore the association between educational level and level of dental anxiety among patients in Pakistan.

METHODOLOGY

The current study was based on descriptive cross-sectional research design. Data was collected from the patients of public sector dental hospital of Lahore. Educational level was taken as demographic and for measuring the dental anxiety level Modified Dental Anxiety Scale[11] was used. It consisted of five questions rated on five-point Likert scale. The range of score lies between 5 to 25. The range of scores for mild anxiety scores lies between 5 to 10, for moderate to severe level of anxiety score ranges from 11-18, and for dental phobia, the scores ranges from 19-25. Data was collected from 160 patients who visited dental hospital at surveying time and participated in the study as volunteers. After taken written consent from the patients data was collected. To explore the relationship of educational level with regards to dental anxiety among patients, Chi square was used. A p value of ≤0.05 was set as the level for statistical significance.

RESULTS

The results of Chi-Square revealed that educational level and dental anxiety showed significant difference (X^2=125.867, P> .001). Mild dental anxiety among patients with below matric education was higher (80%) followed by patients with education level of matriculation (70%), then came patients with Higher secondary school education (52%) and patients with graduation degree were 35%. With moderate to severe dental anxiety, patients with graduation degree were found to be higher (38%) and at lower level were the patients below matric education level (10%). Patients with dental phobia were found more in the category of graduated patients (27%) and least in patients below matric (10%).

Table-1: Dental anxiety among patients with different educational levels

		Dental anxiety level			X^2	Sig.
		Mild Anxiety	Moderate to Severe	Phobia		
Educational Level	Below Matric	80.0%	10.0%	10.0%	125.867	0.00
	Matric	70.0%	20.0%	10.0%		
	Intermediate	52.0%	27.0%	21.0%		
	Graduation	35.0%	38.0%	27.0%		

DISCUSSION

The aim of the study was to explore the prevalence of dental anxiety among the patients with different educational levels. It was explored that educational level and dental anxiety showed significant difference. Mild dental anxiety among patients with below matric education was higher followed by patients with education level of matriculation, and then came patients with higher secondary school education and then patients with graduation degree. With moderate to severe dental anxiety, patients with graduation degree were found to be higher and at lower level were the patients below matric education level. Patients with dental phobia were found more in the category of graduated patients and least in patients below matric. According to Saatchi *et al.*, [9], better education level allows the patient to cope better with dental anxiety and have less dental anxiety level but the results of present study showed that better education causes higher level of dental anxiety may be due to understanding of maximum worse which could be done by the any dental treatment. Whereas the results of current study negates the outcomes of previous studies showed no significant relationship of dental anxiety levels with education [10].

In conclusion, educational level was found to be significant with dental anxiety levels in the patients coming to the public dental hospitals in Pakistan. Factors behind these findings should be explored to fill the gap literature as patients with higher educational level have higher level of dental anxiety which is in opposite of previous literature.

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